As a manufacturer of safety components, the Cobianchi Lift Components AG is responsible for the design and manufacture of the Cobianchi brake safety catches. In order to be able to make the production, the commissioning and the maintenance and servicing easier for the manufacturers of the lift frameworks and the erection / installation companies, these operating instructions have been established.

In these operating instructions the standard version PC14RX, installed width 240 mm, with catch shaft and limit switch located within the traverse, are documented. If the installation type you are confronted with deviates from the version described here, then please contact your technical department, resp., your responsible design department.

In the following, you will find important remarks, which if you duly take note of will in all instances contribute to the impeccable installation and operation.

Attached to these operating instructions must be the following drawing:

Drawing No.	Brake Safety Catch Type	Vertical plan, layout, side view
14RU-BA01-1	PC14RU, PC14RO	Assembly drawing FV with item No.

These instructions consist of several pages of text (depending on the language) and one drawing. Customer-specific solutions may render deviating erection procedures necessary. The brake safety catches can be installed on top of – or underneath the lift cage taking into consideration the various installed widths and the location of the connecting shaft. For detailed information, please refer to our technical documentation.

Subject to deviations from the standard version described here.

To be duly noted prior to the installation:
The brake safety catch consists of two safety catch heads. On both safety catch heads the respective serial numbers have been burnt-in. These numbers have to correspond to the serial numbers on the two stuck-on adhesive labels as well as to that of the enclosed type nameplate and they have to be able to be correlated with the works serial number of the installation. If this should not be the case, then there is a mix-up and it is absolutely necessary that you make contact with your purchasing department, your stores department or directly with the manufacturer.

The safety catch shaft and the resetting spring system in the case of the brake safety catches bidirectional type PC14RU, single action brake safety catch type PC14RO are uniformly constructed in the general sense. The following description for this reason can be applied to all the types.

1. **Installation** in accordance with the enclosed drawings

1.1. The installation of the safety catch heads in all instances takes place by means of a fixing plate **11**, on which the base plate **10** is supported and is laterally displaceable**.** After tightening the screw **7**, it has to be verified, whether the base plate is capable of being laterally displaced and whether it is brought back to its original position at the stop screw **20** by the leaf spring **3**.

1.2. The fixing plate **11** is bolted on with the gusset plate **5** or else directly to the safety catch frame.

1.3. The triggering linkage by means of the supporting plate **12** is installed directly on the gusset plate **5** or on the safety catch frame. Please note: The position of the safety catch shaft has to be centred relative to the brake safety catch and the lifter **1** therefore has to be lying horizontally.

1.4. The force required to hold the triggering lever **1** in its original position is adjustable by means of the threaded rod inside the compression spring **13**. Depending on the application, the spring can be pre-tensioned additionally. The basic setting is at 10 mm pre-tensioning.

2. **Connection**

2.1. Connect the control rope with the rope end connection (rope socket fittings **19**) to the lifter **1** at the control rope attack point.
2.2. Wire the brake safety catch switch **16** (230V, 4A) and check its operation.

2.3. Adjustment: Laterally align the position of the safety catch heads to the rail. Distance between the fixed brake shoe and the rail: max. 2 mm.

2.4. Verification prior to the commissioning:
a) The safety catch heads have to be laterally displaced towards the compression spring **3** and have to be capable of returning to their original position through the spring force.
b) The triggering lever **1** has to be displaced in the triggering direction and has to be returned to its original position through the compression spring **13**.

3. Commissioning

3.1. To be duly noted prior to the first safety catch test:
The rail indispensably has to be cleaned of old dirt, rust protection coatings and any coats of paint or varnish. Most suitable for this are cold cleaning agents or brake disk cleaning agents.

In case of oiled rails, only simple machine oil of the viscosity class ISO 68-150 without any high pressure additives must be used (lubricating oil C in accordance with DIN 51517, part 1). Because oils for gearboxes, motors/engines and hydraulic devices frequently contain additives, they are not suitable for this application. -> Duly note the yellow information sticker.

3.2. Triggering forces for engaging the brake safety catch:
These are dependent on the fixing point of the control rope on the control rope lever **1** and **2** are applicable for the installation of our resetting spring system **13** with compression spring under condition that our installation recommendations have been adhered to:

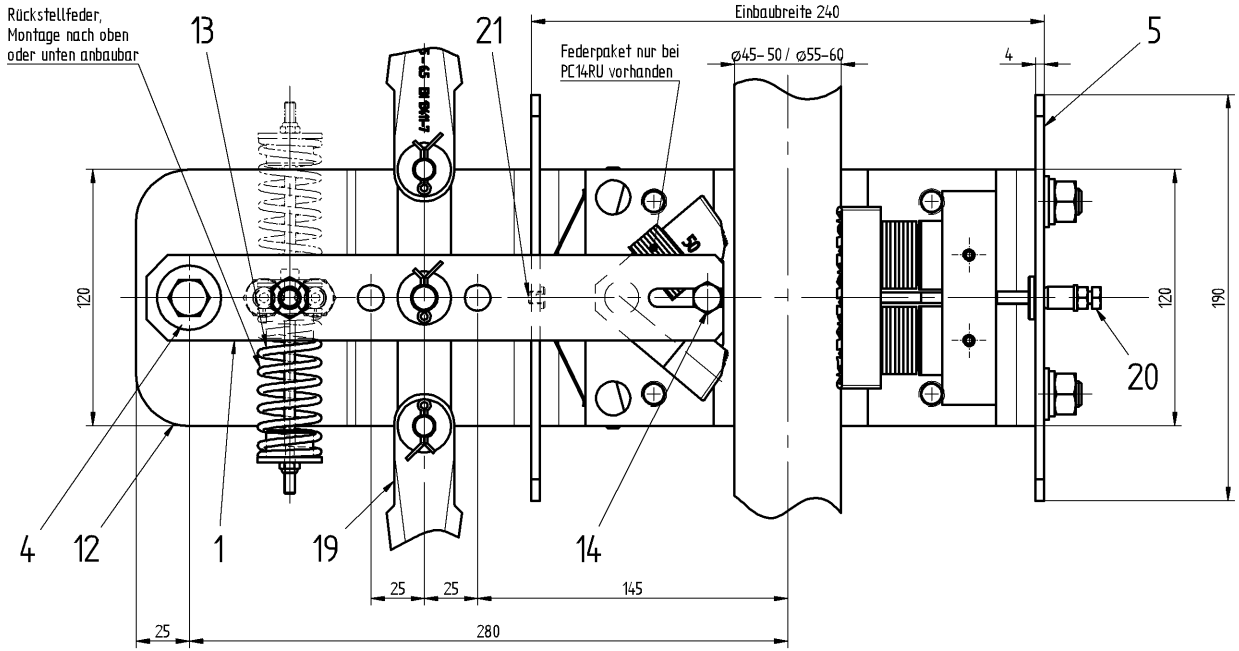
	Distance centre rail – centre control rope		
PC14RU	**140 mm**	**165 mm**	**190 mm**
Braking upwards	70 N	90 N	110 N
Catching downwards	100 N	120 N	150 N
PC14RO	**140 mm**	**165 mm**	**190 mm**
Catching downwards	100 N	120 N	150 N

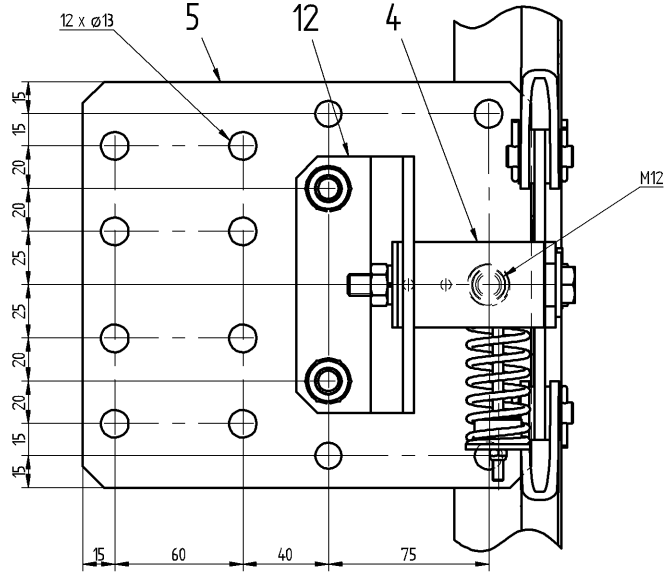
4. Servicing and Maintenance

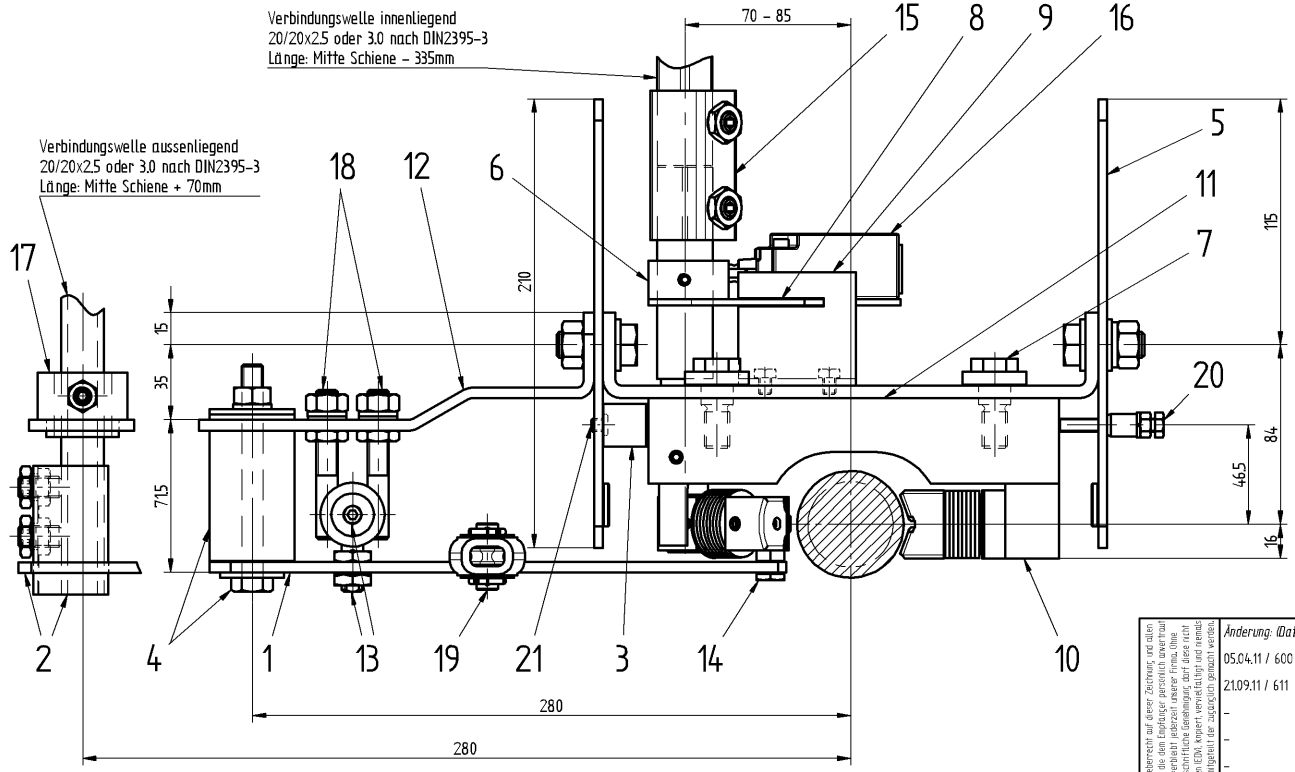
Once the brake safety catches have been correctly installed, the servicing and maintenance is limited to the checking of:

4.1. The condition of the rail, in accordance with the above commissioning instructions.
4.2. Triggering linkage: Synchronous actuation of both safety catch heads, connection without any play through the triggering shaft, free movement of the lifters possible in one or in both directions.
4.3. Return spring: Present, under pre-tensioning.
4.4. Limit switch 16: Electrical-, mechanical function and actuation assured.
4.5. Catch heads: centred, clean, guides of the lift/elevator cage in perfect condition, not expanded/worn.
4.6. Fixing plate: Freely displaceable base plates **10** on the installation plates **11**.
4.7. Cleanness: In general and in particular in the case of building elevators / lifts and conversion works make sure, that the safety catch heads are protected against contamination with plaster of Paris/ gypsum, concrete, cement, mortar, grit or similar building materials. Contaminated safety catch heads have to be dismantled and cleaned.

If these simple instructions are complied with, then the safety for the users of the lift / elevator as well as for the erection and installation company can be significantly increased.







Technische Änderungen vorbehalten

FWA: Verbindungswelle aussenliegend
FWI: Verbindungswelle innenliegend

Stückzahlen pro Fangvorrichtung

FWA	FWI	Gegenstand	Pos.	Werkstoff	Modell	Bemerkungen
2	2	Schraube M6 zu Blattfeder	21	–	–	–
2	2	Einstellschraube M6	20	–	–	–
1	1	Seilschlossgarnitur	19	–	FV-30-1Z	–
2	2	Schaftschraube	18	–	DA-25-1Z	–
2	–	Anschlaghülse	17	–	DA-17-1Z	–
1	1	Endschalter	16	–	DA-05-2	–
–	2	Auslösevierkant kpl.	15	–	DA-03-3Z	–
2	1	Schraube	14	–	44DA-03-1	–
1	1	Rückzugdruckfedersystem kpl.	13	–	14DA-25-1Z	–
2	1	Stützblech 200mm	12	–	14DA-45-3	–
2	2	Einbauplatte 240mm	11	–	14RU-44-2	–
2	2	Grundplatte	10	–	14RU-43-1Z	–
1	1	Endschalterführung	9	–	14DA-38-2	–
1	1	Endschalteranbau	8	–	14DA-38-1	–
8	8	Zylinderschraube	7	–	14DA-29-1	–
1	1	Auslöser	6	–	14DA-28-1	–
4	4	Knotenblech	5	–	14DA-19-1Z	–
–	1	Hülse kpl.	4	–	14RU-17-2Z	–
2	2	Blattfeder 200mm	3	–	14DA-14-3	–
2	–	Heber FWA kpl.	2	–	14RU-01-2Z	–
–	1	Heber FWI kpl.	1	–	14RU-01-1	–

Das Urheberrecht auf dieser Zeichnung und allen Beilagen, die den Empfänger persönlich schriftlich anvertraut sind, verbleibt jederzeit unserer Firma. Ohne unsere schriftliche Genehmigung darf diese nicht kopiert noch Dritten mittelbar oder unmittelbar zugänglich gemacht werden.

Änderung: (Datum / Index)
05.04.11 / 600 –
21.09.11 / 611 –
– –
– –
– –

Ausgabe: 21.09.11 / DH

Zusammenstellung

zu Betriebsanleitung
FV-Typ: PC14RU, PC14RO

Massstab	Gezeichnet	11.02.10	DH
1 : 2.5	Kontrolliert	21.09.11	DH
–	Geprüft	21.09.11	HG
–	Ersatz für:	–	

Cobianchi Liftteile AG
Sägegasse 5, CH-3116 Münsingen
Tel. ++41 – (0)31 720 50 50
Fax ++41 – (0)31 720 50 51
info@cobianchi.ch – www.cobianchi.ch

Zeichnungsnummer
14RU-BA01-1